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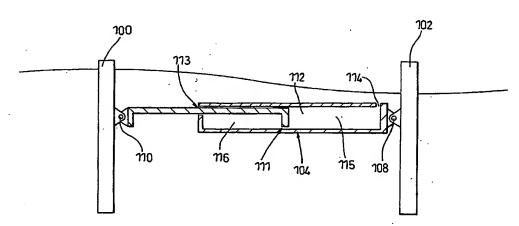
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(54) Title: FLOATING BREAKWATER AND PROPULSION SYSTEM



(57) Abstract: The invention, relates to means for absorbing, extracting or using for propulsion, wave energy occurring naturally in water. The invention overcomes existing breakwater devices of the type that were prone to puncture or were expensive to maintain, were inertial dependant or had mooring loads. One breakwater device comprises first and second structures, (100, 102) arranged substantially parallel one to another, said structures having neutral buoyancy and energy absorbers (111) mounted therebetween. whereby in use, the devices absorb energy from incident and waves as a result of relative motion between the structures. Preferably a third structure is positioned parallel to the second structure, there being a second energy absorber positioned between the second and third structures. Energy absorbers may be arranged to generate an electromotive force or pump a material or fluid. Advantageously a plurality of devices (206) can be interconnected, in the form of a chain or caterpillar to provide a breakwater system. Alternative embodiments of the invention include means to alleviate high side loads on multi-hulled vessels, and a propulsion device in which the first and second structures incorporate louver valve assemblies.